

Claim 88, line 4, delete "electric" and replace therefor  
--electronic--.

Claim 88, line 4, after "means", the second occurrence  
thereof, insert --including means--.

Claim 88, line 6, after "means", insert --including means--.

Claim 89, line 6, delete "selective", and replace therefor  
--electronic--.

Kindly amend claim 101 as follows:

12  
E1  
~~101~~. (Amended) A programmable infusion system in  
accordance with claim 100, wherein said pump means further  
comprises pressure limiting means for controlling the amount of  
medication pumped by said [pumping means is controlled by a  
pressure limit in said] pump means.

Kindly amend claim 105 through 107 as follows:

22  
E2  
~~105~~. (Amended) A programmable infusion system in  
accordance with claim 104, wherein said variable volume means  
comprises at least one flexible wall, movement of said  
at least one flexible wall varying the volume of said variable  
volume means[;], and means for moving said at least one flexible  
wall.--

22  
~~106~~. (Amended) A programmable infusion system in  
accordance with claim 105, further comprising spring means for  
urging said at least one flexible wall in a manner which  
decreases the volume of said variable volume means, the  
magnitude of the force applied to and stored by said spring

means increasing as the volume of said variable volume means increases due to the displacement of said at least one flexible wall thereof by said moving means.--

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<sup>23</sup>  
~~107~~. (Amended) A programmable infusion system in accordance with claim <sup>22</sup>~~106~~, wherein said at least one flexible wall comprises a bellows assembly having mounted on one end thereof a plate, the other end of said bellows assembly being in communication with said selected medication, the walls of said bellows assembly serving as said spring means.--

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Claim 109, lines 2 and 4, after "bellows", in each instance, insert --assembly--.

Claim 110, line 2, after "wherein" insert--said plate is magnetizable,--.

Claim 110, lines 2 and 3 thereof delete "comprises said plate being magnetizable and" and replace therefor ~~comprising~~--.

Claim 112, line 3, delete "the", both occurrences thereof, and insert therefor, in each instance, --a--.

Claim 113, line 3, delete "value" and replace therefor --valve--.

Claim 114, line 5, delete "lining" and replace therefor --living--.

Claim 115, line 2, delete "102" and replace therefor --103--.

Claim 117, line 5, delete "means;" and replace therefor  
--chamber,--.

Claim 120, line 2, after "119" insert --,--.

Claim 120, line 5, delete "caused by said moving means".

Kindly amend claim 123 as follows:

83  
6  
~~37-123.~~ (amended) A programmable infusion system in  
accordance with claim ~~122~~<sup>38</sup>, wherein said pump means comprises  
variable volume means for storing said selected medication  
within said pump means, an increase in volume of said variable  
volume means permitting drawing of said selected medication  
into said pump means, a decrease in volume of said variable  
volume means permitting expulsion of said selected medication  
from said pump means, said system further comprising first means  
for indicating the operation of said pump means when a decrease  
in volume of said variable volume means is not followed by a  
signal from said monitoring means corresponding to a pressure  
pulse of said selected medication expelled into said outlet  
chamber, said first indicating means being operably coupled to  
said telemetry means.--

Claim 124, line 5, delete "caused by said moving means".

Claim 125, line 2, after "said" insert --at least one--.

Claim 125, line 3, delete "characteristics" and replace  
therefor --characteristic--.

Claim 127, line 2, after "said" insert --at least one--.

Kindly amend claim 130 as follows:

~~130~~<sup>46</sup> (Amended) A programmable infusion system in accordance with claim ~~130~~<sup>45</sup>, wherein said inhibiting means comprises:

84 at least one programmable rate memory unit coupled to said command receiver means, each of said at least one programmable rate memory units for receiving and storing an infusion rate input command corresponding to said remotely selectable rate;

at least one limit control unit, each of said at least one limit control units providing [which provides] a fixed rate limit; and

means for comparing each of said infusion rate input commands to a corresponding said fixed rate limit, infusion of said medication at a rate exceeding said fixed rate limit being inhibited.--

Claim 131, line 2, after "coupling" insert --each of--.

Claim 131, line 3, delete "said", at the first occurrence thereof.

Claim 131, line 3, delete "limit" and replace therefor --units--.

Claim 131, line 6, after "in" insert --corresponding--.

Claim 131, line 7, delete "unit" and replace therefor --units--.

Claim 132, line 2, after "said" insert --at least one-- and delete "are" and replace therefore --is--.

Claim 134, line 5, delete "fixed" and after "time" insert  
--of a predetermined length--.

Claim 135, line 4, after "preselected" insert  
--medication--.

Claim 135, line 5, delete "fixed" and after "time" insert  
--of a predetermined length--.

Kindly amend claim 136 as follows:

52  
~~136.~~ (Amended) A programmable infusion system in  
accordance with claim 135, wherein said infusion means includes  
a pump means which executes in pulses, said inhibiting means  
comprising a programmable memory rate unit coupled to said  
command receiver for storing initially a dose limit number  
corresponding to a first maximum number of infusion pulses  
preselected as allowable during a first shifting time window of  
a predetermined length, pulse quantities being subtracted from  
said number stored in said programmable memory rate unit as  
infusion pulses are executed by said infusion means, pulse  
quantities being added to said stored number as time elapses  
such that said number does not exceed said first maximum number,  
said subtraction and addition being accomplished in running  
integral fashion, said inhibiting means not permitting pulsing  
of said pump means [a number of times] at a rate in excess of  
the rate represented by said dose limit number stored in said  
programmable memory rate unit.--

53  
~~(Kindly amend claim 137 as follows:)~~

53  
~~137.~~ [Amended] A programmable infusion system in  
accordance with claim 136, wherein said memory rate unit also

records the number of pulses which have been inhibited and causes said pump means of said infusion means to execute said pulses when said pulses can be subtracted as a result of the elapse of time from said dose limit number stored in said programmable memory rate unit [as a result of the elapse of time].--

~~(Kindly amend claim 138 as follows:)~~

§5  
54  
--138<sup>52</sup> [Amended] A programmable infusion system in accordance with claim ~~136~~<sup>52</sup>, wherein said programmable memory rate unit also stores initially another dose limit number corresponding to a second maximum number of infusion pulses preselected as allowable during a second shifting time window of a predetermined length, said second shifting time window being longer in length than said first shifting time window, pulse quantities being subtracted from said another dose limit number stored in said programmable memory rate unit as infusion pulses are executed by said infusion means, pulse quantities being added to said another dose limit [stored] number as time elapses such that said another dose limit number does not exceed said first maximum number, said subtraction and addition being accomplished in running integral fashion, said inhibiting means not permitting pulsing of said pump means at a rate [a number of time] in excess of the rate represented by said another dose limit number stored in said programmable memory rate unit.--

Claim 139, line 5, after "from" insert --both-- and after "said", at the first occurrence thereof, insert --dose limit--.

Claim 144, the last line thereof, after "second" insert --maximum--.

Claim 145, line 2, after "125" insert --,--.

Claim 149, the last line thereof, delete "operation" and replace therefor --operational--.

Kindly amend claims 150 through 162 as follows:

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~~66~~ 150. (Amended) A programmable infusion system in accordance with claim ~~149~~<sup>65</sup>, further comprising means for delivering [wherein] said alarm signal pattern [is delivered] to said living body subcutaneously.--

~~67~~ 151. (Amended) A programmable infusion system in accordance with claim ~~150~~<sup>66</sup>, further comprising means for detecting a medication leak, said medication detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a medication leak out of said medication reservoir.--

86 ~~68~~ 152. (Amended) A programmable infusion system in accordance with claim ~~151~~<sup>66</sup>, further comprising means for detecting a body fluid leak, said body fluid detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a leak of body fluids into said infusion apparatus.--

~~69~~ 153. (Amended) A programmable infusion system in accordance with claim ~~152~~<sup>66</sup>, further comprising means for detecting the rate at which said infusion means is operating, said rate detecting means being coupled to said alarm generating mean, wherein one of said improper operational [operation] conditions comprises [comprise] operation of said infusion means at an improper rate.--

70  
--154. (Amended) A programmable infusion system in accordance with claim ~~150~~<sup>66</sup>, wherein one of said improper operational [operation] conditions comprises receiving of a command by said command receiver means which cannot be executed.--

71  
--155. (Amended) A programmable infusion system in accordance with claim ~~150~~<sup>66</sup>, further comprising battery means for powering said infusion means and means for determining the voltage of said battery means, said voltage determining means being coupled to said alarm generating means, wherein one of said improper operational conditions [operation condition] comprises low battery means voltage.--

65 72  
--156. (Amended) A programmable infusion system in accordance with claim ~~150~~<sup>66</sup>, further comprising means for detecting the amount of medication disposed in said reservoir, said medication amount detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a preselected amount of medication remaining in said medication reservoir.--

73  
--157. (Amended) A programmable infusion system in accordance with claim ~~149~~<sup>65</sup>, further comprising means for detecting a medication leak, said medication detecting means being coupled to said alarm means, wherein one of said improper operational [operation] conditions comprises a medication leak out of said medication reservoir.--

74  
--158. (Amended) A programmable infusion system in accordance with claim ~~149~~<sup>65</sup>, further comprising means for detecting a body fluid leak, said body fluid detecting means being coupled to said alarm generating means, wherein one of



said improper operational [operation] conditions comprises a leak of body fluids into said infusion apparatus.--

<sup>75</sup>  
--~~159~~. (Amended) A programmable infusion system in accordance with claim ~~149~~<sup>65</sup>, further comprising means for detecting the rate at which said infusion means is operating, said rate detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises operation of said infusion means at an improper rate.--

86      <sup>76</sup>  
--~~160~~. (Amended) A programmable infusion system in accordance with claim ~~149~~<sup>65</sup>, wherein one of said improper operational [operation] conditions comprises receiving of a command by said command receiver means which cannot be executed.--

<sup>77</sup>  
--~~161~~. (Amended) A programmable infusion system in accordance with claim ~~149~~<sup>65</sup>, further comprising battery means for powering said infusion means and means for determining the voltage of said battery means, said voltage detecting means being coupled to said alarm generating means wherein one of said improper operational conditions [operation condition] comprises low battery means voltage.--

<sup>78</sup>  
--~~162~~. (Amended) A programmable infusion system in accordance with claim ~~149~~<sup>65</sup>, further comprising means for detecting the amount of medication disposed in said reservoir, said medication amount detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a preselected amount of medication remaining in said medication reservoir. <sup>4</sup>

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Claim 164, last line thereof, delete "pumping" and replace therefor --pump--.

Kindly amend claims 165 and 166 as follows:

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~~81~~  
~~165~~. (Amended) A programmable infusion system in accordance with claim ~~164~~<sup>80</sup>, wherein said recording means comprises:

means for storing the rate at which said [pumping] pump means pumps over a preselected time period;

means for storing a programmable input corresponding to a minimum medication infusion rate; and

<sup>87</sup>  
means for comparing the rate recorded by said first recited storing [recording] means to the rate stored in said second recited storing means.--

~~82~~  
~~166~~. (Amended) A programmable infusion system in accordance with claim ~~165~~<sup>81</sup>, further comprising means for providing an alarm signal when said rate recorded by said [recording] first recited storing means is less than said programmable input corresponding to said minimum medication infusion rate recorded by said second recited storing means.--

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Claim 167, line 3, delete "deduced" and replace therefor --recorded--.

Claim 168, lines 3 and 5, delete "pumping" and in each instance replace therefor --pump--.

Claim 170, line 3, delete "deduced" and replace therefor --outputted--.

Claim 171, lines 3 and 4, delete "pumping" and in both instances replace therefor --pump--.

Claim 171, line 4 delete "if" and replace therefor --is--.

Claim 172, line 3, delete "both".

Claim 173, line 4, delete "pumping" and replace therefore --pump--.

Claim 177, line 3 delete "deduced" and replace therefor --outputted--.

Claim 178, lines 4 and 7, delete "pumping" and in both instances replace therefor --pump--.

Claim 179, line 3, delete "number" and replace therefor --numbers--.

Claim 180, line 3 "deduced" and replace therefor --outputted--.

Claim 185, line 2, after "85" insert --,--.

Claim 188, line 2, after "187" insert --,--.

Claim 189, line 6, delete "and".

Claim 189, line 7, delete "the reservoir" and replace therefore --said medication--.

Claim 190, line 3, delete "reservoir" and replace therefor --medication--.

Claim 193, line 5, delete "telemetering" and replace therefor --telemetry--.

Claim 194, line 2, after "body" insert --of a patient--.

Claim 200, line 2, delete "telemetering" and replace therefor --telemetry--.

Claim 203, the last line thereof, after "selected" insert --one of-- and delete "input" and replace therefor --inputs--.

Claim 204, line 4, after "means", the second occurrence thereof, insert --including means--.

Claim 204, line 6, after "means", the second occurrence thereof, insert --including--.

Claim 205, line 6, delete "selective" and replace therefor --electronic--.

Claim 206, line 2, delete "204" and replace therefor --203--.

Kindly amend claim 209 as follows:

28  
125  
--209. (Amended) A programmable infusion system in accordance with claim 124, wherein said pump means further comprises pressure limiting means for controlling the amount of medication pumped by said pump means [is controlled by a pressure limit in said pump means].--

Kindly amend claims 213 through 215 as follows:

~~128~~  
1 ~~213~~. (Amended) A programmable infusion system in accordance with claim ~~212~~<sup>128</sup>, wherein said variable volume means comprises at least one flexible wall, movement of said at least one flexible wall varying the [value] volume of said variable volume means[;], and means for moving said at least one flexible wall.--

130  
--~~214~~. (Amended) A programmable infusion system in accordance with claim ~~213~~<sup>129</sup>, further comprising spring means for urging said at least one wall in a manner which decreases the volume of said variable volume means, the magnitude of the force applied to and stored by said spring means increasing as the volume of said variable volume means increases due to the displacement of said at least one flexible wall thereof by said moving means.--

131 ✓  
--~~215~~. (Amended) A programmable infusion system in accordance with claim ~~214~~<sup>130</sup>, wherein said at least one flexible wall comprises a bellows assembly having mounted on one end thereof a plate, the other end of said bellows assembly being in communication with said selected medication, the walls of said bellows assembly serving as said spring means.--

Claim 217, lines 2 and 4, after "bellows", in each instance, insert --assembly--.

Claim 217, line 3, delete "movable" and replace therefor --variable--.

Claim 217, line 5, after "in" insert --contact--.

Kindly amend claim 218 as follows:

810  
137  
--218. (Amended) A programmable infusion system in  
accordance with claim 131, wherein said  
plate is magnetizable, said moving means [comprises said plate  
being magnetizable and] comprising a coil disposed proximate to  
said plate, said coil selectively radiating a pulsing magnetic  
field, pulsing of said coil causing said plate to be moved.--

Claim 220, line 3, delete "the" at both occurrences thereof,  
and insert therefor in each instance --a--.

Claim 221, lines 10 and 15, delete "value" and in each  
instance replace therefor --valve--.

Claim 223, line 2, delete "210" and replace therefor  
--211--.

Claim 225, line 5, delete "means;" and replace therefor  
--chamber,--.

Claim 228, line 5, delete "caused by said moving means".

Claim 230, line 3, delete "medicaion" and replace therefor  
--medication--.

Claim 230, line 4, delete "lining" and replace therefor  
--living--.

Kindly amend claim 231 as follows:

811  
147  
--231. (Amended) A programmable infusion system in  
accordance with claim 146, wherein said pump means comprises

variable volume means for storing said selected medication  
within said pump means, an increase in volume of said variable  
volume means permitting drawing of said selected medication  
into said pump means, a decrease in volume of said variable  
volume means permitting expulsion of said selected medication  
from said pump means, said system further comprising first means  
for indicating the operation of said pump means when a decrease  
in volume of said variable volume means is not followed by a  
signal from said monitoring means corresponding to a pressure  
pulse of said selected medication expelled into said outlet  
chamber, said first indicating means being operably coupled to  
said telemetry means.--

Claim 232, line 5, delete "caused by said moving means".

Claim 233, line 2, after "said" --at least one--.

Claim 233, line 3, delete "characteristics" and replace  
therefor --characteristic--.

Claim 235, line 2, after "said" insert --at least one--.

Kindly amend claims 238 and 239 as follows:

<sup>154</sup>  
~~238.~~ (Amended) A programmable infusion system in  
accordance with claim <sup>153</sup>237, wherein said inhibiting means  
comprises:

<sup>12</sup>  
at least one programmable rate memory unit coupled to said  
command receiver means, each of said at least one programmable  
rate memory units for receiving and storing an infusion rate  
input command corresponding to said remotely selectable rate;

at least one limit control unit, each of said at least one limit control units providing [which provides] a fixed rate limit; and

means for comparing each of said infusion rate input commands to a corresponding said fixed rate limit, infusion of said medication at a rate exceeding said fixed rate limit being inhibited.--

§12 <sup>155</sup>  
--~~239~~. (Amended) A programmable infusion system in accordance with claim <sup>154</sup>~~238~~, further comprising command decoder means for coupling each of said at least one [said] programmable rate memory units [limit] to said command receiver means, said command decoder means for decoding said command signals received by said command receiver means into said infusion rate inputs for receipt by and storage in corresponding said at least one programmable rate memory units [unit].--

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Claim 240, line 2, after "said" insert --at least one-- and after "units" delete "are" and replace therefor --is--.

Claim 242, line 2, delete "238" and replace therefor --241--.

Claim 243, line 5, delete "fixed" and after "time" insert --of a predetermined length--.

Claim 244, line 3, delete "of" and insert therefor --by--.

Claim 244, line 5, delete "fixed" and after "time" insert --of a predetermined length--.



Kindly amend claims 245 through 248 as follows:

813  
1/61-~~245~~<sup>149</sup>. (Amended) A programmable infusion system in accordance with claim ~~245~~<sup>149</sup>, wherein said infusion means includes a pump means which executes in pulses, said inhibiting means comprising a programmable memory rate unit coupled to said command receiver for storing initially a dose limit number corresponding to a first maximum number of infusion pulses preselected as allowable during a first shifting time window of a predetermined length, pulse quantities being subtracted from said number stored in said programmable memory rate unit as infusion pulses are executed by said infusion means, pulse quantities being added to said stored number as time elapses such that said number does not exceed said first maximum number, said subtraction and addition being accomplished in running integral fashion, said inhibiting means not permitting pulsing of said pump means at a rate [a number of times] in excess of the rate represented by said dose limit number stored in said programmable memory rate unit.--

162  
--~~246~~<sup>141</sup>. (Amended) A programmable infusion system in accordance with claim ~~246~~<sup>141</sup>, wherein said memory rate unit also records the number of pulses which have been inhibited and causes said pump means of said infusion means to execute said pulses when said pulses can be subtracted as a result of the elapse of time from said dose limit number stored in said programmable memory rate unit [as a result of the elapse of time].--

163  
--~~247~~<sup>141</sup>. (Amended) A programmable infusion system in accordance with claim ~~247~~<sup>141</sup>, wherein said programmable memory rate unit also stores initially another dose limit number corresponding to a second maximum number of infusion pulses

§13  
preselected as allowable during a second shifting time window of a predetermined length, said second shifting time window being longer in length than said first shifting time window, pulse quantities being subtracted [in fixed running integral fashion] from said another dose limit number stored in said programmable memory rate unit as infusion pulses are executed by said infusion means, pulse quantities being added to said another dose limit [second] number as time elapses such that said another dose limit number does not exceed said first maximum number, said subtraction and addition being accomplished in running integral fashion, said inhibiting means not permitting pulsing of said pump means at a rate [a number of times] in excess of the rate represented by said another dose limit number stored in said programmable memory rate unit.--

164  
--248. (Amended) A programmable infusion system in accordance with claim 247, wherein said rate memory unit also records the number of pulses which have been inhibited and causes said pump means of said infusion means to execute said pulses when said pulses can be subtracted from both said dose limit numbers stored in said programmable memory rate unit.--

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Claim 253, the last line thereof, after "second" insert  
--maximum--.

Claim 258, last line thereof, delete "operation" and replace therefor --operational--.

Kindly amend claims 259 through 271 as follows:

§14  
135  
--259. (Amended) A programmable infusion system in accordance with claim 258, further comprising means for

delivering [wherein] said alarm signal pattern [is delivered] to said living body subcutaneously.--

<sup>174</sup>  
--~~260~~. (Amended) A programmable infusion system in accordance with claim <sup>175</sup>~~259~~, further comprising means for detecting a medication leak, said medication detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a medication leak out of said medication reservoir.--

<sup>177</sup>  
--~~261~~. (Amended) A programmable infusion system in accordance with claim <sup>175</sup>~~259~~, further comprising means for detecting a body fluid leak, said body fluid detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a leak of body fluids into said infusion apparatus.--

<sup>178</sup>  
--~~262~~. (Amended) A programmable infusion system in accordance with claim <sup>175</sup>~~259~~, further comprising means for detecting the rate at which said infusion means is operating, said rate detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises operation of said infusion means at an improper rate.--

<sup>179</sup>  
--~~263~~. (Amended) A programmable infusion system in accordance with claim <sup>175</sup>~~259~~, wherein one of said improper operational [operation] conditions comprises receiving of a command by said command receiver means which cannot be executed.--

<sup>180</sup>  
--~~264~~. (Amended) A programmable infusion system in accordance with claim <sup>175</sup>~~259~~, further comprising battery means for

powering said infusion means and means for determining the voltage of said battery means, said voltage determining means being coupled to said alarm generating means, wherein one of said improper operational conditions [operation condition] comprises low battery means voltage.--

181  
--265. (Amended) A programmable infusion system in accordance with claim ~~259~~<sup>175</sup>, further comprising means for detecting the amount of medication disposed in said reservoir, said medication amount detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a preselected amount of medication remaining in said medication reservoir.--

182  
--266. (Amended) A programmable infusion system in accordance with claim ~~258~~<sup>174</sup>, further comprising means for detecting a medication leak, said medication detecting means being coupled to said alarm means, wherein one of said improper operational [operation] conditions comprises a medication leak out of said medication reservoir.--

183  
--267. (Amended) A programmable infusion system in accordance with claim ~~257~~<sup>174</sup>, further comprising means for detecting a body fluid leak, said body fluid detecting means being coupled to said alarm generating means wherein one of said improper operational [operation] conditions comprises a leak of body fluids into said infusion apparatus.

184  
--268. A programmable infusion system in accordance with claim ~~258~~<sup>174</sup>, further comprising means for detecting the rate at which said infusion means is operating, said rate detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises operation of said infusion means at an improper rate.--

185  
~~269~~ (Amended) A programmable infusion system in accordance with claim ~~258~~<sup>174</sup> wherein one of said improper operational [operation] conditions comprises receiving of a command by said command receiver means which cannot be executed.--

186  
§ 14  
--~~270~~ (Amended) A programmable infusion system in accordance with claim ~~258~~<sup>174</sup> further comprising battery means for powering said infusion means and means for determining the voltage of said battery means, said voltage determining means being coupled to said alarm generating means wherein one of said improper operational conditions [operation condition] comprises low battery means voltage.--

187  
--~~271~~ (Amended) A programmable infusion system in accordance with claim ~~258~~<sup>174</sup> further comprising means for detecting the amount of medication disposed in said reservoir, said medication amount <sup>detecting</sup> delivery means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a preselected amount of medication remaining in said medication reservoir.--

18  
Claim 273, last line thereof, delete "pumping"<sup>(p. 2 reservoir)</sup> and replace therefor --pump--.

Kindly amend claim 274 as follows:

1915  
§ 15  
~~1910~~-274. (Amended) A programmable infusion system in accordance with claim ~~273~~<sup>189</sup>, wherein said recording means comprises:

means for storing the rate at which said [pumping] pump means pumps over a preselected time period;

means for storing a programmable input corresponding to a minimum medication infusion rate; and

means for comparing the rate recorded by said first recited storing [recording] means to the rate stored in said second recited storing means.--

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<sup>191</sup>  
--~~275~~ (Amended) A programmable infusion system in accordance with claim <sup>190</sup>~~274~~, further comprising means for providing an alarm signal when said rate recorded by said first recited storing [recording] means is less than said programmable input corresponding to said minimum medication infusion rate recorded by said second recited storing means.--

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Claim <sup>191</sup>276, line 3, delete "deduced" and replace therefor --recorded--.

Claim <sup>191</sup>277, lines 3 and 5, delete "pumping" and in each instance replace therefor --pump--.

Claim <sup>191</sup>278, line 1 after "278" insert ---.

Claim <sup>191</sup>279, line 3, delete "deduced" and replace therefor --outputted--.

Claim <sup>191</sup>280, lines 3 and 4, delete "pumping" and in each instance replace therefor --pump--.

Claim <sup>191</sup>280, line 4, delete "if" and replace therefor --is--.

Claim <sup>191</sup>281, line 3, delete "both".

Claim <sup>191</sup>282, line 4, delete "pumping" and replace therefor --pump--.

Claim 286, line 3, delete "deduced" and replace therefor  
--outputted--.

Claim 287, lines 4 and 7, delete "pumping" and in each  
instance replace therefor --pump--.

Claim 288, line 3, delete "number" and replace therefor  
--numbers--.

Claim 289, line 3, delete "deduced" and replace therefor  
--outputted--.

Claim 297, line 6, delete "relate" and replace therefor  
--relative--.

Claim 298, line 2, after "297" insert --,--.

Claim 299, line 6, delete "and".

Claim 299, line 7, delete "reservoir" and replace therefor  
--said medication--.

Claim 300, lines 2 and 3, delete "valve" and replace  
therefor in both instances --volume-- and on line 3 delete  
"reservoir" and replace therefor --medication--.

Claim 303, line 5, delete "telemetering" and replace  
therefor --telemetry--.

Claim 305, line 2, after "body" insert --of a patient--.

Kindly amend Claim 307 as follows:

*2236*  
*222*  
§ 16  
9  
~~307~~ (Amended) A programmable infusion system in accordance with claim ~~306~~, wherein said pump means further comprises pressure limiting means for controlling the amount of medication pumped by said pump means [is controlled by a pressure limit in said pump means].--

Kindly amend claims 311 through 313 as follows:

*227*  
~~311~~ (Amended) A programmable infusion system in accordance with claim ~~310~~, wherein said variable volume means comprises at least one flexible wall, movement of said at least one flexible wall varying the [value] volume of said variable volume means[;], and means for moving said at least one flexible wall--.

*228*  
§ 17  
6  
~~312~~ (Amended) A programmable infusion system in accordance with claim ~~311~~, *227* further comprising spring means for urging said at least one flexible wall in a manner which decreases the volume of said variable volume means, the magnitude of the force applied to and stored by said spring means increasing as the volume of said variable volume means [increase] increases due to the displacement of said at least one flexible wall thereof by said moving means.--

*229*  
~~313~~ (Amended) A programmable infusion system in accordance with claim ~~312~~, *228* wherein said at least one flexible wall comprises a bellows assembly having mounted on one end thereof a plate, the other end of said bellows assembly being in communication with said selected medication, the walls of said bellows assembly serving as said spring means.--



Claim 314, line 2, delete "312" and replace therefor --313--  
and delete "a" at the second occurrence thereof.

Claim 315 lines 2 and 4, after "bellows", in each instance,  
insert --assembly--.

Claim 315, line 3, delete "movable" and replace therefor  
--variable--.

Kindly amend claim 316 as follows:

818  

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~~316~~<sup>232</sup>. (Amended) A programmable infusion system in  
accordance with claim ~~313~~<sup>229</sup>, wherein said plate is magnetizable,  
said moving means [comprises said plate being magnetizable and]  
comprising a coil disposed proximate to said plate, said coil  
selectively radiating a pulsing magnetic field, pulsing of said  
coil causing said plate to be moved.--  

---

Claim 318, line 3, delete "the", at both occurrences thereof  
and replace therefor --a-- in each instance.

Claim 321, line 2, delete "320" and replace therefor  
--309--.

Claim 323, line 5, delete "means" and replace therefor  
--chamber--.

Claim 326, line 5, delete "caused by said moving means".

Claim 328, line 4, delete "lining" and replace therefor  
--living--.

Kindly amend claim 329 as follows:

245 ~~--329--~~ (Amended) A programmable infusion system in accordance with Claim ~~328~~ <sup>244</sup>, wherein said pump means comprises variable volume means for storing said selected medication within said pump means, an increase in volume of said variable volume means permitting drawing of said selected medication into said pump means, a decrease in volume of said variable volume means permitting expulsion of said selected medication from said pump means, said system further comprising first means for indicating the operation of said pump means when a decrease in volume of said variable volume means is not followed by a signal from said monitoring means corresponding to a pressure pulse of said selected medication expelled into said outlet chamber, said first indicating means being operably coupled to said telemetry means.--

Claim 330, line 3, delete "wherein" and replace therefor --when--.

Claim 330, line 5, delete "caused by said moving means".

Claim 332, the last line thereof, after "selected" insert --one of-- and delete "input" and replace therefor --inputs--.

Claim 333, lines ~~4~~ and ~~6~~, after means, the second occurrence thereof in each line, insert --including means-- in each instance.

Claim 334, line ~~6~~, delete "selective" and replace therefor --electronic--.

Claim 335, line 2, delete "334" and replace therefor --332--.

Claim 344, line 2, after "said" insert --at least one--.

Claim 344, line 3, delete "characteristics" and replace therefor --characteristic--.

Claim 346, line 2, after "said" insert --at least one--.

Kindly amend claim 349 as follows:

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<sup>265</sup>  
--349. (Amended) A programmable infusion system in accordance with claim <sup>246</sup>348, wherein said inhibiting means comprises:

at least one programmable rate memory unit coupled to said command receiver means, each of said at least one programmable rate memory units for receiving and storing an infusion rate input command corresponding to said remotely selectable rate;

at least one limit control unit, each of said at least one limit control units providing [which provides] a fixed rate limit; and

means for comparing each of said infusion rate input commands to a corresponding said fixed rate limit, infusion of said medication at a rate exceeding said fixed rate limit being inhibited.--

---

<sup>which occurs</sup>  
Claim 350, line 3, delete "said" and delete "limit" and replace "limit" with --units--.

Claim 350, line 6, after "in" insert --corresponding--.

Claim 350, line 7, delete "unit" replace therefor --units--.

Claim 351, line 2, after "said" insert --at least one-- and delete "are" and replace therefor --is--.

Claim 353, line 4, after "preselected" insert  
--medication--.

Claim 353, the last line thereof, delete "fixed" and after  
"time" insert --of a predetermined length--.

Claim 354, line 4, after "preselected" insert  
--medication--.

Claim 354, line 5, delete "fixed" and after "time" insert  
--of a predetermined length--.

Kindly amend claims 355 through 357 as follows:

ε2!  
-~~355~~<sup>327</sup>. (Amended) A programmable infusion system in  
accordance with claim <sup>268</sup>344, wherein said fluid handling mechanism  
of said infusion means includes a pump means which executes in  
pulses, said inhibiting means comprising a programmable memory  
rate unit coupled to said command receiver for storing initially  
a dose limit number corresponding to a first maximum number of  
infusion pulses preselected as allowable during a first shifting  
time window of a predetermined length, pulse quantities being  
subtracted from said [first] number stored in said programmable  
memory rate unit as infusion pulses are executed by said  
infusion means, pulse quantities being added to said [first]  
stored number as time elapses such that said number does not  
exceed said first maximum number, said subtraction and addition  
being accomplished in running integral fashion, said inhibiting  
means not permitting pulsing of said pump means at a rate [a  
number of times] in excess of the rate represented by said  
dose limit number stored in said programmable memory rate  
unit.--

572-256. (Amended) A programmable infusion system in accordance with claim <sup>271</sup>355, wherein said memory rate unit also records the number of pulses which have been inhibited and causes said pump means of said fluid handling mechanism to execute said pulses when said pulses can be subtracted as a result of the elapse of time from said dose limit number stored in said programmable memory rate unit [as a result of the elapse of time].--

821 273-257. [Amended] A programmable infusion system in accordance with claim <sup>271</sup>355, wherein said programmable memory rate unit also stores initially another dose limit number corresponding to a second maximum number of infusion pulses preselected as allowable during a second shifting time window of a predetermined length, said second [fixed] shifting time window being longer in length than said first shifting time window, pulse quantities being subtracted from said another dose limit number stored in said programmable memory rate unit as infusion pulses are executed by said infusion means, pulse quantities being added to said another dose limit [second] number as time elapses such that said another dose limit number does not exceed said first maximum number, said subtraction and addition being accomplished in running integral fashion, said inhibiting means not permitting pulsing of said pump means at a rate [a number of times] in excess of the rate represented by said another dose limit number stored in said programmable memory rate unit.--

---

Claim 358, line 5, after "from" insert --both-- and after "said" insert --dose limit--.

Claim 363, the last line thereof, after "second" insert --maximum--.

Claim 368, the last line thereof, delete "operation" and replace therefor --operational--.

Kindly amend claims 369 through 381 as follows:

~~295~~<sup>284</sup> 369. (Amended) A programmable infusion system in accordance with claim ~~368~~<sup>284</sup>, [wherein] further comprising means for delivering said alarm signal pattern [is delivered] to said living body subcutaneously.--

§ 22  
6  
~~286~~<sup>285</sup> 370. (Amended) A programmable infusion system in accordance with claim ~~369~~<sup>285</sup>, further comprising means for detecting a medication leak, said medication detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a medication leak out of said medication reservoir.--

~~287~~<sup>285</sup> 371. (Amended) A programmable infusion system in accordance with claim ~~369~~<sup>285</sup>, further comprising means for detecting a body fluid leak, said body fluid detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a leak of body fluids into said infusion apparatus.--

~~288~~<sup>285</sup> 372. (Amended) A programmable infusion system in accordance with claim ~~369~~<sup>285</sup>, further comprising means for detecting the rate at which said infusion means is operating, said rate detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises operation of said infusion means at an improper rate.--

289  
--373. (Amended) A programmable infusion system in accordance with claim <sup>285</sup>369, wherein one of said improper operational [operation] conditions comprises receiving of a command by said command receiver means which cannot be executed.--

290  
--374. (Amended) A programmable infusion system in accordance with claim <sup>285</sup>369, further comprising battery means for powering said infusion means and means for determining the voltage of said battery means, said voltage determining means being coupled to said alarm generating means, wherein one of said improper operational conditions [operation condition] comprises low battery means voltage.--

522  
291  
--375. (Amended) A programmable infusion system in accordance with claim <sup>285</sup>369, further comprising means for detecting the amount of medication disposed in said reservoir, said medication amount detecting means being coupled to said alarm generating means wherein one of said improper operational [operation] conditions comprises a preselected amount of medication remaining in said medication reservoir.--

292  
--376. (Amended) A programmable infusion system in accordance with claim <sup>284</sup>369, further comprising means for detecting a medication leak, said medication detecting means being coupled to said alarm means, wherein one of said improper operational [operation] conditions comprises a medication leak out of said medication reservoir.--

293  
--377. (Amended) A programmable infusion system in accordance with claim <sup>284</sup>369, further comprising means for detecting a body fluid leak, said body fluid detecting means being coupled to said alarm generating means, wherein one of

said improper operational [operation] conditions comprises a leak of body fluids into said infusion [invusion] apparatus.--

294  
--378. (Amended) A programmable infusion system in accordance with claim ~~368~~<sup>284</sup>, further comprising means for detecting the rate at which said infusion means is operating, said rate detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises operation of said infusion [invusion] means at an improper rate.--

222  
295  
--379. (Amended) A programmable infusion system in accordance with claim ~~368~~<sup>284</sup>, wherein one of said improper operational [operation] conditions comprises receiving of a command by said command receiver means which cannot be executed.--

296  
--380. (Amended) A programmable infusion system in accordance with claim ~~368~~<sup>284</sup>, further comprising battery means for powering said infusion means and means for determining the voltage of said battery means, said voltage determining means being coupled to said alarm generating means wherein one of said improper operational conditions [operation condition] comprises low battery means voltage.--

297  
--381. (Amended) A programmable infusion system in accordance with claim ~~368~~<sup>284</sup>, further comprising means for detecting the amount of medication disposed in said reservoir, said medication amount detecting means being coupled to said alarm generating means wherein one of said improper operational [operation] conditions comprises a preselected amount of medication remaining in said medication reservoir.--

---



Claim 382, line 3, delete "pusposes" and replace therefor  
--purposes--.

Claim 383, line 5, delete "pumping"<sup>(2d occurrence)</sup> and replace therefor  
--pump--.

Kindly amend claim 384 as follows:

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~~384~~<sup>380</sup>. (Amended) A programmable infusion system in  
accordance with claim ~~385~~<sup>389</sup>, wherein said recording means  
comprises:

means for storing the rate at which said [pumping] pump  
means pumps over a preselected time period;

means for storing a programmable input corresponding to a  
minimum medication infusion rate; and

means for comparing the rate recorded by said [recording]  
first recited storing means to the rate stored in said  
second recited storing means.--

---

Claim 385, line 3, delete "recording" and replace therefor  
--first recited storing--.

Claim 385, line 3, delete "if" and replace therefor --is--.

Claim 386, line 3, delete "deduced" and replace therefor  
--recorded--.

Claim 387, lines 3 and 5, delete "pumping" and in each  
instance replace therefor --pump--.

Claim 389, line 3, delete "deduced" and replace therefor  
--outputted--.

Claim 390, lines ~~2~~<sup>3</sup> and 4, delete "pumping" and in each instance replace therefor --pump--.

Claim 390, line 4, delete "if" and replace therefor --is--.

Claim 391, line 3, delete "both".

Claim 392, line 4, delete "pumping" and replace therefor --pump--.

Claim 396, line 3, delete "deduced" and replace therefor --outputted--.

Claim 397, lines 4 and 7, delete "pumping" and in each instance replace therefor --pump--.

Claim 398, line 3, delete "number" and replace therefor --numbers--.

Claim 399, line 3, delete "deduced" and replace therefor --outputted--.

Claim 408, line 6, delete "and".

Claim 408, line 7, delete "the reservoir" and replace therefor --said medication--.

Claim 409, line 3, delete "reservoir" and replace therefor --medication--.

Claim 410, line 5, delete "ante-chamber" and replace --antechamber-- and after "when" insert --said--.

Claim 410, line 6, after "opened" insert --,--.

Claim 414, line 2, after "said" insert --at least one--.

Kindly amend claim 417 as follows:

---

~~333-417~~. (Amended) A programmable infusion system in accordance with claim ~~410~~<sup>334</sup>, wherein said inhibiting means comprises:

at least one programmable rate memory unit coupled to said command receiver means, each of said at least one programmable rate memory units for receiving and storing an [a] infusion rate input command corresponding to said remotely selectable rate;

at least one limit control unit, each of said at least one limit control units providing [which provides] a fixed rate limit; and

means for comparing each of said infusion rate input commands to a corresponding said fixed rate limit, infusion of said medication at a rate exceeding said fixed rate limit being inhibited.--

---

Claim 418, line 2, after "coupling" insert --each of--.

Claim 418, line 3, delete "said", at the first occurrence thereof, and delete "unit" and replace "unit" with --units--.

Claim 418, line 6, after "in" insert --corresponding--.

Claim 419, line 2, after "said" insert --at least one-- and delete "are" and replace therefor --is--.

Claim 421, line 5, delete "fixed" and after "time" insert --of a predetermined length--.

Kindly amend claims 422 through 425 as follows:

3.38 ~~--422~~. (Amended) A programmable infusion system in accordance with claim ~~422~~ <sup>328</sup>, wherein said inhibiting means precludes infusion of said medication by said infusion means when the selected said commandable infusion rate exceeds said preselected medication infusion rate during a [fixed] window of time of a predetermined length which shifts continuously.--

339 ~~--423~~. (Amended) A programmable infusion system in accordance with claim ~~423~~ <sup>328</sup>, wherein said infusion means includes a pump means which executes in pulses, said inhibiting means comprising a programmable memory rate unit coupled to said command receiver for storing initially a dose limit number corresponding to a first maximum number of infusion pulses preselected as allowable during a first shifting time window of a predetermined length, pulse quantities being subtracted from said number stored in said programmable memory rate unit as infusion pulses are executed by said infusion means, pulse quantities being added to said stored number as time elapses such that said number does not exceed said first maximum number, said subtraction and addition being accomplished in running integral fashion, said inhibiting means not permitting pulsing of said pump means at a rate [a number of times] in excess of the rate represented by said dose limit number stored in said programmable memory rate unit.--

340 ~~--424~~. (Amended) A programmable infusion system in accordance with claim ~~424~~ <sup>339</sup>, wherein said memory rate unit also records the number of pulses which have been inhibited and causes said pump means of said infusion means to execute said pulses when said pulses can be subtracted as a result of the elapse of time from said dose limit number stored in said

programmable memory rate unit [as a result of the elapse of time].

825 341--425. (Amended) A programmable infusion system in accordance with claim ~~425~~<sup>339</sup>, wherein said programmable memory rate unit also stores initially another dose limit number corresponding to a second maximum number of infusion pulses preselected as allowable during a second shifting time window of a predetermined length, said second shifting time window being longer in length than said first shifting time window, pulse quantities being subtracted from said another dose limit number stored in said programmable memory rate unit as infusion pulses are executed by said infusion means, pulse quantities being added to said another dose limit [stored] number as time elapses such that said another dose limit number does not exceed said first maximum number, said subtraction and addition being accomplished in running integral fashion, said inhibiting means not permitting pulsing of said pump means at a rate [a number of times] in excess of the rate represented by said another dose limit number stored in said programmable memory rate unit.--

---

Claim 426, line 5, after "from" delete "said number" and replace therefor --both said dose limit numbers--.

Claim 431, line 6, after "second" insert --maximum--.

Claim 434, line 12, after "selected" insert --one of--.

Claim 434, the last line thereof, delete "input" and replace therefor --inputs--.



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increases due to the displacement of said at least one flexible wall thereof by said moving means.--

---

Claim 454, line 2, after "said" insert --at least one--.

Claim 454, lines 4 and 5, after "bellows" insert --assembly-- in each instance.

Claim 456, lines 2 and 4, after "bellows" insert --assembly-- in each instance.

Claim 457, line 2, after "wherein" insert --said plate is magnetizable,-- and delete "comprises said plate being".

Claim 457, line 3, delete "magnetizable and" and replace therefor --comprising--.

Claim 459, line 3, delete "the" at both occurrences thereof, and insert therefor --a-- in each instance.

Claim 460, lines 3 and 5, delete "value" and in each instance replace therefor --valve--.

Claim 461, line 5, delete "lining" and replace therefor --living--.

Claim 462, line 2, delete "461" and replace therefor --450--.

Claim 464, line 8, delete "means;" and replace therefor --chamber--.

Claim 467, line 5, delete "caused by said moving means".

Kindly amend claim 470 as follows:

386  
--470. (Amended) A programmable infusion system in  
accordance with claim ~~469~~<sup>385</sup>, wherein said pump means comprises  
variable volume means for storing said selected medication  
within said pump means, an increase in volume of said vari-  
able volume means permitting drawing of said selected  
medication into said pump means, a decrease in volume of said  
E28 variable volume means permitting expulsion of said selected  
medication from said pump means, said system further comprising  
first means for indicating the operation of said pump means when  
a decrease in volume of said variable volume means is not  
followed by a signal from said monitoring means corresponding to  
a pressure pulse of said selected medication expelled into said  
outlet chamber, said first indicating means being operably  
coupled to said telemetry means.--

Claim 471, line 5, delete "caused by said moving means".

Claim 472, the last line thereof, delete "operation" and  
replace therefor --operational--.

Kindly amend claims 473 through 482 as follows:

389  
--473. (Amended) A programmable infusion system in  
accordance with claim ~~472~~<sup>388</sup>, further comprising means for  
delivering [wherein] said alarm signal pattern [is delivered] to  
E29 said living body subcutaneously.--

390  
--474. (Amended) A programmable infusion system in  
accordance with claim ~~473~~<sup>389</sup>, further comprising means for  
detecting a medication leak, said medication detection means  
being coupled to said alarm generating means, wherein one of



said improper operational [operation] conditions comprises a medication leak out of said medication reservoir.--

391  
~~389~~. (Amended) A programmable infusion system in accordance with claim ~~473~~ <sup>389</sup>, further comprising means for detecting a body fluid leak, said body fluid detecting means being coupled to said alarm means wherein one of said improper operational [operation] conditions comprises a leak of body fluids into said infusion apparatus.--

392  
~~389~~. (Amended) A programmable infusion system in accordance with claim ~~473~~ <sup>389</sup>, further comprising means for detecting the rate at which said infusion means is operating, said rate detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions [comprise] comprises operation of said infusion means at an improper rate.--

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393  
~~389~~. (Amended) A programmable infusion system in accordance with claim ~~473~~ <sup>389</sup>, wherein one of said improper operational [operation] conditions comprises receiving of a command by said command receiver means which cannot be executed.--

394  
~~389~~. (Amended) A programmable infusion system in accordance with claim ~~473~~ <sup>389</sup>, further comprising battery means for powering said infusion means and means for determining the voltage of said battery means, said voltage detecting means being coupled to said alarm generating means, wherein one of said improper operational conditions [operation condition] comprises low battery means voltage.--

385  
--~~479~~. (Amended) A programmable infusion system in accordance with claim ~~473~~<sup>389</sup>, further comprising means for detecting the amount of medication disposed in said reservoir, said medication amount detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a preselected amount of medication remaining in said medication reservoir.--

386  
--~~480~~. (Amended) A programmable infusion system in accordance with claim ~~472~~<sup>388</sup>, further comprising means for detecting a medication leak, said medication detecting means being coupled to said alarm means, wherein one of said improper operational [operation] conditions comprises a medication leak out of said medication reservoir.--

ε 29

397  
--~~481~~. (Amended) A programmable infusion system in accordance with claim ~~472~~<sup>388</sup>, further comprising means for detecting a body fluid leak, said body fluid detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a leak of body fluids into said infusion apparatus.--

398  
--~~482~~. (Amended) A programmable infusion system in accordance with claim ~~474~~<sup>388</sup>, further comprising means for detecting the rate at which said infusion means is operating, said rate detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises [comprise] operation of said infusion means at an improper rate.--

---

Claim 483, line 2, delete "operation" and replace therefor --operational--.

Claim 483, line 3, after "receiver" insert --means--.

Kindly amend claims 484 and 485 as follows:

§30  
--484. <sup>400</sup>~~389~~ (Amended) A programmable infusion system in accordance with claim ~~422~~<sup>389</sup>, further comprising battery means for powering said infusion means and means for determining the voltage of said battery means, said voltage determining means being coupled to said alarm generating means wherein one of said improper operational conditions [operation condition] comprises low battery means voltage.--

<sup>400</sup>  
--485. (Amended) A programmable infusion system in accordance with claim ~~422~~<sup>389</sup>, further comprising means for detecting the amount of medication disposed in said reservoir, said medication amount detecting, means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a preselected amount of medication remaining in said medication reservoir.--

Claim 487, last line thereof, delete "pumping" and replace therefor --pump--.

Kindly amend claim 488 as follows:

§31  
--488. <sup>404</sup>~~403~~ (Amended) A programmable infusion system in accordance with claim ~~487~~<sup>403</sup>, wherein said recording means comprises:

means for storing the rate at which said [pumping] pump means pumps over a preselected time period;

means for storing a programmable input corresponding to a minimum medication infusion rate; and

means for comparing the rate recorded by said [recording]  
first recited storing means to the rate stored in said  
second recited storing means.--

§ 31  
6

<sup>405</sup>  
--~~489~~. (Amended) A programmable infusion system in  
accordance with claim ~~488~~<sup>404</sup>, further comprising means for  
providing an alarm signal when said rate recorded by said  
[recording] first recited storing means is less than said  
programmable input corresponding to said minimum medication  
infusion rate recorded by said second recited storing means.--

---

Claim 490, line ~~3~~, delete "deduced" and replace therefor  
--recorded--.

Claim 491, lines ~~3~~ and ~~5~~, delete "pumping" and in each  
instance replace therefor --pump--.

Claim 493, line ~~3~~, delete "deduced" and replace therefor  
--outputted--.

Claim 494, lines ~~3~~ and ~~4~~, delete "pumping" and in each  
instance replace therefor --pump--.

Claim 494, line ~~4~~, delete "if" and replace therefor --is--.

Claim 495, lines ~~3~~ and ~~4~~, delete "both" in each instance.

Claim 496, line ~~4~~ delete "pumping" and replace therefor  
--pump--.

Claim 500, line ~~3~~, delete "deduced" and replace therefor  
--outputted--.

Claim 501, lines 4 and 7, delete "pumping" and in each instance replace therefor --pump--.

Claim 502, line 3, delete "number" and replace therefor --numbers--.

Claim 503, line 3, delete "deduced" and replace therefor --outputted--.

Claim 512, line 6, delete "and".

Claim 512, line 7, delete "the reservoir" and replace therefor --said medication--.

Claim 513, line 3, delete "reservoir" and replace therefor --medication--.

Claim 517, line 2, after "body" insert --of a patient--.

Claim 517, line 9, delete "characteristics" and replace therefor --characteristic--.

Claim 517, line 13, delete "operation" and replace therefor --operational--.

Kindly amend claims 518 through 530 as follows:

434 ✓  
--~~518~~ (Amended) A programmable infusion system in accordance with claim ~~517~~ <sup>433</sup>, further comprising means for delivering [wherein] said alarm signal pattern [is delivered] to said living body subcutaneously.--

435 ✓  
✓  
--~~519~~ (Amended) A programmable infusion system in accordance with claim ~~518~~ <sup>433</sup>, further comprising means for detecting a medication leak, said medication detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a medication leak out of said medication reservoir.--

532 ✓  
436 ✓  
--~~520~~ (Amended) A programmable infusion system in accordance with claim ~~518~~ <sup>433</sup>, further comprising means for detecting a body fluid leak, said body fluid detecting means being coupled to said alarm generating means wherein one of said improper operational [operation] conditions comprises a leak of body fluids into said infusion apparatus.--

437 ✓  
--~~521~~ (Amended) A programmable infusion system in accordance with claim ~~518~~ <sup>433</sup>, further comprising means for detecting the rate at which said infusion means is operating, said rate detecting means being coupled to said alarm means, wherein one of said improper operational [operation] conditions comprises [comprise] operation of said infusion means at an improper rate.--

✓ 438 ✓  
--~~522~~ (Amended) A programmable infusion system in accordance with claim ~~518~~ <sup>433</sup>, wherein one of said improper operational [operation] conditions comprises receiving of a command by said command receiver means which cannot be executed.--

✓ 439 --523. (Amended) A programmable infusion system in accordance with claim ~~516~~<sup>433</sup>, further comprising battery means for powering said infusion means and means for determining the voltage of said battery means, said voltage determining means being coupled to said alarm generating means, wherein one of said improper operational conditions [operation condition] comprises low battery means ~~voltage~~.--

✓ 440 --~~524~~. (Amended) A programmable infusion system in accordance with claim ~~518~~<sup>433</sup>, further comprising means for detecting the amount of medication disposed in said reservoir, said medication amount detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a preselected amount of medication remaining in said medication reservoir.--

ε32 441 --~~525~~. (Amended) A programmable infusion system in accordance with claim ~~517~~<sup>433</sup>, further comprising means for detecting a medication leak, said medication detecting means being coupled to said alarm means, wherein one of said improper operational [operation] conditions comprises a medication leak out of said medication reservoir.--

442 --~~526~~. (Amended) A programmable infusion system in accordance with claim ~~517~~<sup>433</sup>, further comprising means for detecting a body fluid leak, said body fluid detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a leak of body fluids into said infusion apparatus.--

443 ~~444~~ --~~527~~. (Amended) A programmable infusion system in accordance with claim ~~517~~<sup>433</sup>, further comprising means for detecting the rate at which said infusion means is operating

, said rate detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises [comprise] operation of said infusion means at an improper rate.--

444 ~~528~~. (Amended) A programmable infusion system in accordance with ~~claim 517~~ <sup>433</sup>, wherein one of said improper operational [operation] conditions comprises receiving of a command by said command receiver means which cannot be executed.--

832 445 ~~529~~. (Amended) A programmable infusion system in accordance with claim ~~517~~ <sup>433</sup>, further comprising battery means for powering said infusion means and means for determining the voltage of said battery means, said voltage determining means being coupled to said alarm generating means, wherein one of said improper operational conditions [operation condition] comprises low battery means voltage.--

446 ~~530~~. (Amended) A programmable infusion system in accordance with claim ~~517~~ <sup>433</sup>, further comprising means for detecting the amount of medication disposed in said reservoir, said medication amount detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a preselected amount of medication remaining in said medication reservoir.--

---

Claim 533, line 12, after "selected" insert --one of--.

Claim 533, last line thereof delete "input" and replace therefor --inputs--.



Claim 534, line 4, delete "electric" and replace therefor  
--electronic--and after "control means" insert --including  
means--.

Claim 534, line 6, after "control means" insert --including  
means--.

Claim 535, line 6, delete "selective" and replace therefor  
--electronic--.

Kindly amend claim 547 as follows:

463-547. (Amended) A programmable infusion system in  
accordance with claim 546, wherein said pump means further  
comprises pressure limiting means for controlling the amount of  
medication pumped by said pumping means [is controlled by a  
pressure limit in said pump means].--

Claim 550, line 5, after "means," insert --a--.

Kindly amend claims 551 through 553 as follows:

462-551. (Amended) A programmable infusion system in  
accordance with claim 550, wherein said variable volume means  
comprises at least one flexible wall, movement of said at least  
one flexible wall varying the volume of said variable volume  
means[;], and means for moving said at least one flexible  
wall.--

468-552. (Amended) A programmable infusion system in  
accordance with claim 551, further comprising spring means for  
urging said at least one flexible wall in a manner which

decreases the volume of said variable volume means, the magnitude of the force applied to and stored by said spring means increasing as the volume of said variable volume means increases due to the displacement of said at least one flexible wall thereof by said moving means.--

§ 34 ✓ ~~468~~ 469  
-553. (Amended) A programmable infusion system in accordance with claim ~~552~~ 468, wherein said at least one flexible wall comprises a bellows assembly having mounted on one end thereof a plate, the other end of said bellows assembly being in communication with said selected medication, the walls of said bellows assembly serving as said spring means.--

---

Claim 555, lines 2 and 4, after "bellows" insert in each instance --assembly--.

Kindly amend claim 556 as follows:

§ 35 ✓ ~~472~~ 473  
-556. (Amended) A programmable infusion system in accordance with claim ~~553~~ 469, wherein said plate is magnetizable, said moving means [comprises said plate being magnetizable and] comprising a coil disposed proximate to said plate, said coil selectively radiating a pulsing magnetic field, pulsing of said coil causing said plate to be moved.--

---

Claim 558, line 3, delete "the" at both occurrences thereof and in each instance replace therefor --a--.

Claim 559, line 3, delete "value" and replace therefor --valve--.

Claim 560, line 5, delete "lining" replace therefor --living--.

Claim 561, line 2, delete "560" and replace therefor  
--549--.

Claim 563, line 5, delete "extended" and replace therefor  
--external--.

Claim 563, line 8, delete "means" at the first occurrence  
thereof, and replace therefor --chamber--.

Claim 566, line 5 delete "caused by said moving means".

Claim 567, line 4, delete "and".

Claim 567, line 5, delete "infusion" and replace therefor  
--information--.

Kindly amend claim 569 as follows:

*836*  
*485*  
*484*  
485. (Amended) A programmable infusion system in  
accordance with claim 569, wherein said pump means comprises  
variable volume means for storing said selected medication  
within said pump means, an increase in volume of said variable  
volume means permitting drawing of said selected medication  
into said pump means, a decrease in volume of said variable  
volume means permitting expulsion of said selected medication  
from said pump means, said system further comprising first means  
for indicating the operation of said pump means when a decrease  
of volume of said variable volume means is not followed by a  
signal from said monitoring means corresponding to a pressure  
pulse of said selected medication expelled into said outlet  
chamber, said first indicating means being operably coupled to  
said telemetry means.--

Claim 570, line 4, delete "about" and replace therefor  
--absent--.

Claim 570, line 5, delete "caused by said moving means".

Kindly amend claim 571 as follows:

487-571. (Amended) A programmable infusion system in  
accordance with claim ~~517~~<sup>433</sup>, wherein one of said at least one  
remotely commandable operational characteristic  
[characteristics] comprises an infusion rate variable on  
237 command, said infusion apparatus further comprising means for  
inhibiting said infusion means from infusing said selected  
medication if a preselected medication infusion rate is exceeded  
by a commanded infusion rate, said inhibiting means being  
operably coupled to said infusion means.--

Claim 573, line 2, after "said" insert --at least one--.

Kindly amend claim 576 as follows:

492-576. (Amended) A programmable infusion system in  
accordance with claim ~~575~~<sup>481</sup> [571], wherein said inhibiting means  
comprises:  
238 at least one programmable rate memory unit coupled to said  
command receiver means, each of said at least one programmable  
rate memory units for receiving and storing an [a] infusion rate  
input command corresponding to said remotely selectable rate;  
at least one limit control unit, each of said at least one  
limit control units providing [which provides] a fixed rate  
limit; and  
means for comparing each of said infusion rate input  
commands to a corresponding said fixed rate limit, infusion of

38 said medication at a rate exceeding said fixed rate limit being inhibited.--

---

Claim 577, line 2, after "coupling" insert --each of --.

Claim 577, line 3, delete "said" and delete "unit" and replace "unit" with --units--.

Claim 577, the last line thereof, delete "unit" and replace therefor --units--.

Claim 578, line 2, after "said" insert --at least one--.

Claim 578, line 2 delete "are" and replace therefor --is--.

Claim 580, line 5, delete "fixed" and after "time" insert --of a predetermined length--.

Claim 581, line 4, after "preselected" insert --medication--.

Claim 581, the last line thereof, delete "fixed" and after "time" insert --of a predetermined length--.

Kindly amend claims 582 through 584 as follows:

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498-582. (Amended) A programmable infusion system in accordance with claim 571, wherein said infusion means includes a pump means which executes in pulses, said inhibiting means comprising a programmable memory rate unit coupled to said command receiver for storing initially a dose limit number corresponding to a first maximum number of infusion pulses preselected as allowable during a first shifting [maximum] time

window of a predetermined length, pulse quantities being subtracted from said number stored in said programmable memory rate unit as infusion pulses are executed by said infusion means, pulse quantities being added to said stored number as time elapses such that said number does not exceed said first maximum number, said subtraction and addition being accomplished in running integral fashion, said inhibiting means not permitting pulsing of said pump means at a rate [a number of times] in excess of the rate represented by said dose limit number stored in said programmable memory rate unit.--

499  
--~~498~~ (Amended) A programmable infusion system in accordance with claim ~~497~~, wherein said memory rate unit also records the number of pulses which have been inhibited and causes said pump means of said infusion means to execute said pulses when said pulses can be subtracted as a result of the elapse of time from said dose limit number stored in said programmable memory rate unit.--

500  
--~~499~~ (Amended) A programmable infusion system in accordance with claim ~~498~~, wherein said programmable memory rate unit also stores initially another dose limit number corresponding to a second maximum number of infusion pulses preselected as allowable during a second shifting time window of a predetermined length, said second shifting time window being longer in length than said first shifting time window, pulse quantities being subtracted from said another dose limit number stored in said programmable memory rate unit as infusion pulses are executed by said infusion means, pulse quantities being added to said another dose limit number as time elapses such that said another dose limit number does not exceed said first maximum number, said subtraction and addition being accomplished in running integral fashion, said inhibiting means not

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permitting pulsing of said pump means at a rate [a number of times] in excess of the rate represented by said another dose limit number stored in said programmable memory rate unit.--

---

Claim 585, line 5, after "from" delete "said" and replace therefor --both said dose limit--.

Claim 590, the last line thereof, after "second" insert --maximum--.

Claim 592, the last line thereof, delete "pumping" and replace therefor --pump--.

Kindly amend claims 593 and 594 as follows:

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~~593~~<sup>509</sup>. (Amended) A programmable infusion system in accordance with claim ~~592~~<sup>508</sup>, wherein said recording means comprises:

means for storing the rate at which said [pumping] pump means pumps over a preselected time period;

means for storing a programmable input corresponding to a minimum medication infusion rate; and

means for comparing the rate recorded by said [recording] first recited storing means to the rate stored in said second recited storing means.--

640

~~594~~<sup>510</sup>. (Amended) A programmable infusion system in accordance with claim ~~593~~<sup>509</sup>, further comprising means for providing an alarm signal when said rate recorded by said [recording] first recited storing means is less than said programmable input corresponding to said minimum medication infusion rate recorded by said second recited storing means.--

---

Claim 595, line 3, delete "deduced" and replace therefor  
--recorded--.

Claim 595, line 5, delete "injection" and replace therefor  
--information--.

Claim 596, lines 3 and 5, delete "pumping" and in each  
instance replace therefor --pump--.

Claim 598, line 3, delete "deduced" and replace therefor  
--outputted--.

Claim 599, lines 3 and 4, delete "pumping" and in each  
instance replace therefor --pump--.

Claim 599, the last line thereof, delete "if" and replace  
therefor --is--.

Claim 600, lines 3 and 4, delete "both" in each instance.

Claim 601, line 4, delete "pumping" and replace therefor  
--pump--.

Claim 605, line 3, delete "deduced" and replace therefor  
--outputted--.

Claim 606, lines 4 and 7 delete "pumping" and replace  
therefor in each instance --pump--.

Claim 608, line 3, delete "deduced" and replace therefor  
--outputted--.

Claim 616, line 2, after "615" insert --,--.



Claim 617, line 6, delete "and".

Claim 617, line 7, delete "the reservoir" and replace therefor --said medication--.

Claim 621, line 8, delete "telemetering" and replace therefor --telemetry--.

Claim 622, line 2, after "body" insert --of a patient--.

Claim 622, line 12, delete "pumping" and replace therefor --pump--.

Kindly amend claims 623 and 624 as follows:

---

<sup>539</sup>  
~~623~~. (Amended) A programmable infusion system in accordance with claim <sup>538</sup>~~622~~, wherein said recording means comprises:

means for storing the rate at which said [pumping] pump means pumps over a preselected time period;

means for storing a programmable input corresponding to a minimum medication infusion rate; and

means for comparing the rate recorded by said first recited storing [recording] means to the rate stored in said second recited storing means.--

<sup>540</sup>  
~~624~~. (Amended) A programmable infusion system in accordance with claim <sup>539</sup>~~623~~, further comprising means for providing an alarm signal when said rate recorded by said first recited storing [recording] means is less than said programmable input corresponding to said minimum medication infusion rate recorded by said second recited storing means.--

---

Claim 625, line 3, delete "deduced" and replace therefor  
--recorded--.

Claim 626, lines 3 and 5, delete "pumping" and in each  
instance replace therefor --pump--.

Claim 628, line 3, delete "deduced" and replace therefor  
--outputted--.

Claim 628, line 4, after "means" the second occurrence  
thereof, insert --,--.

Claim 629, lines 3 and 4, delete "pumping" and in each  
instance replace therefor --pump--.

Claim 629, the last line thereof, delete "if" and replace  
therefor --is--.

Claim 630, lines 3 and 4, delete "both" in each instance.

Claim 631, line 4, delete "pumping" and replace therefor  
--pump--.

Claim 635, line 3, delete "deduced" and replace therefor  
--outputted--.

Claim 636, lines 4 and 7, delete "pumping" and in each  
instance replace therefor --pump--.

Claim 637, line 3, delete "number" and replace therefor  
--numbers--.

Claim 638, line 3, delete "deduced" and replace therefor  
--outputted--.

Claim 644, line 12 after "selected" insert --one of--.

Claim 644, the last line thereof, delete "input" and replace  
therefor --inputs--.

Claim 645, line 4, delete "electric" replace therefor  
--electronic-- and after "control means" insert --including  
means--.

Claim 645, line 6, after "control means" insert --including  
means--.

Claim 646, line 6, delete "selective" and replace therefor  
--electronic--.

Kindly amend claim 657 as follows:

572  
572  
542  
657. (Amended) A programmable infusion system in  
accordance with claim 656, wherein said pump means further  
comprises pressure limiting means for controlling the amount of  
medication pumped by said pump means [is controlled by a  
pressure limit in the said pump means].--

Claim 660, line 2, after "pump" insert --means--.

Claim 661, line 3, after "said" insert --at least one,--.

Claim 661, line 4, delete ";" and after "said", the second  
occurrence thereof, insert --at least one--.

Kindly amend claim 662 as follows:

~~576~~<sup>578</sup>--~~662~~<sup>579</sup>. (Amended) A programmable infusion system in accordance with claim ~~661~~<sup>578</sup>, further comprising spring means for urging said at least one flexible wall in a manner which decreases the volume of said variable volume means, the magnitude of the force applied to and stored by said spring means increasing as the volume of said variable volume means increases due to the displacement of said at least one flexible wall thereof by said moving means.--

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~~579~~<sup>578</sup>--~~663~~<sup>578</sup>. (Amended) A programmable infusion system in accordance with claim ~~662~~<sup>578</sup>, wherein said at least one flexible wall comprises a bellows assembly having mounted on one end thereof a plate, the other end of said bellows assembly being in communication with said selected medication, the walls of said bellows assembly serving as said spring means.--

Claim 665, lines 2 and 4, after "bellows" insert in each instance --assembly--.

Kindly amend claim 666 as follows:

~~580~~<sup>579</sup>--~~666~~<sup>579</sup>. (Amended) A programmable infusion system in accordance with claim ~~665~~<sup>579</sup>, wherein said plate is magnetizable, said moving means [comprises said plate being magnetizable and] comprising a coil disposed proximate to said plate, said coil selectively radiating a pulsing magnetic field, pulsing of said coil causing said plate to be moved.--

§44

Claim 668, line 3, delete "the" at both occurrences thereof and in each instance replace therefor --a--.

Claim 669, line 3, delete "value" and replace therefor  
--valve--.

Claim 670, line 5, delete "lining" and replace therefor  
--living--.

Claim 671, line 2, delete "669" and replace therefor  
--659--.

Claim 673, line 5, delete "extended" and replace therefor  
--external--.

Claim 673, line 8, delete "means"; and replace therefor  
--chamber,--.

Claim 673, line 11, delete "providng" and replace therefor  
--providing--.

Claim 676, line 5, delete "caused by said moving means".

Claim 677, line 4, delete "and".

Claim 677, line 5, delete "infusion" and replace therefor  
--information--.

Kindly amend claim 679 as follows:

--Claim <sup>595</sup>~~679~~. (Amended) A programmable infusion system in  
accordance with claim <sup>594</sup>~~678~~, wherein said pump means comprises  
variable volume means for storing said selected medication  
within said pump means, an increase in volume of said variable  
volume means permitting drawing of said selected medication  
into said pump means, a decrease in volume of said variable

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volume means permitting expulsion of said selected medication  
from said pump means, said system further comprising first means  
for indicating the operation of said pump means when a decrease  
in volume of said variable volume means is not followed by a  
signal from said monitoring means corresponding to a pressure  
pulse of said selected medication expelled into said outlet  
chamber, said first indicating means being operably coupled to  
said telemetry means.--

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Claim 680, line 5, delete "caused by said moving means".

Claim 681, line 3, delete "characteristics" and replace  
therefor --characteristic--.

Claim 683, line 2, after "said" insert --at least one--.

Kindly amend claim 686 as follows:

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---

~~602-686~~ (Amended) A programmable infusion system in  
accordance with claim ~~685~~<sup>601</sup> [681], wherein said inhibiting means  
comprises:

at least one programmable rate memory unit coupled to said  
command receiver means, each of said at least one programmable  
rate memory units for receiving and storing [a] an infusion rate  
input command corresponding to said remotely selectable rate;

at least one limit control unit, each of said at least one  
limit control units providing [which provides] a fixed rate  
limit; and

means for comparing each of said infusion rate input  
commands to a corresponding said fixed rate limit, infusion of  
said medication at a rate exceeding said fixed rate limit being  
inhibited.--

---

Claim 687, line 2, after "coupling" insert --each of--.

Claim 687, line 3, delete "said" and delete "unit" and replace "unit" with --units--.

Claim 687, line 6, after "in" insert --corresponding--.

Claim 688, line 2, after "said" insert --at least one-- and delete "are" and replace therefor --is--.

Claim 690, line 5, delete "fixed" and after "time" insert --of a predetermined length--.

Claim 691, line 4, after "preselected" insert --medication--.

Claim 691, the last line thereof, delete "fixed" and after "time" insert --of a predetermined length--.

Kindly amend claims 692 through 694 as follows:

608-692. (Amended) A programmable infusion system in accordance with claim 547, wherein said pump means executes in pulses, said inhibiting means comprising a programmable memory rate unit coupled to said command receiver for storing initially a dose limit number corresponding to a first maximum number of infusion pulses preselected as allowable during a first shifting time window of a predetermined length, pulse quantities being subtracted from said number stored in said programmable memory rate unit as infusion pulses are executed by said infusion means, pulse quantities being added to said stored number as time elapses such that said number does not exceed said first maximum number, said subtraction and addition being accomplished

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in running integral fashion, said inhibiting means not permitting pulsing of said pump means at a rate [a number of times] in excess of the rate represented by said dose limit number stored in said programmable memory rate unit.--

~~609~~  
--~~693~~. (Amended) A programmable infusion system in accordance with claim ~~692~~, wherein said memory rate unit also records the number of pulses which have been inhibited and causes said pump means of said infusion means to execute said pulses when said pulses can be subtracted as a result of the elapse of time from said dose limit number stored in said programmable memory rate unit [as a result of the elapse of time].--

847  
~~610~~  
--~~694~~. (Amended) A programmable infusion system in accordance with claim ~~692~~, wherein said programmable memory rate unit also stores initially another dose limit number corresponding to a second maximum number of infusion pulses preselected as allowable during a second shifting time window of a predetermined length, said second shifting time window being longer in length than said first shifting time window, pulse quantities being subtracted from said another dose limit number stored in said programmable memory rate unit as infusion pulses are executed by said infusion means, pulse quantities being added to said another [stored] dose limit number as time elapses such that said another dose limit number does not exceed said first maximum number, said subtraction and addition being accomplished in running integral fashion, said inhibiting means not permitting pulsing of said pump means at a rate [a number of times] in excess of the rate represented by said another dose limit number stored in said programmable memory rate unit.--



Claim 695, line 5, after "from" insert --both--.

Claim 695, line 5, after "said" insert --dose limit--.

Claim 700, the last line thereof after "second" insert  
--maximum--.

Claim 702, the last line thereof, delete "operation" and  
insert therefor --operational--.

Kindly amend claims 703 through 715 as follows:

---

~~617~~ 703. (Amended) A programmable infusion system in  
accordance with claim ~~702~~ <sup>619</sup> further comprising means for  
delivering [wherein] said alarm signal pattern [is delivered] to  
said living body subcutaneously.--

<sup>620</sup>  
~~704~~. (Amended) A programmable infusion system in  
accordance with claim ~~703~~ <sup>619</sup>, further comprising means for  
detecting a medication leak, said medication detecting means  
being coupled to said alarm generating means, wherein one of  
said improper operational [operation] conditions comprises a  
medication leak out of said medication reservoir.--

<sup>621</sup>  
~~705~~. (Amended) A programmable infusion system in  
accordance with claim ~~703~~ <sup>619</sup>, further comprising means for  
detecting a body fluid leak, said body fluid detecting means  
being coupled to said alarm generating means, wherein one of  
said improper operational [operation] conditions comprises a  
leak of body fluids into said infusion apparatus.--

<sup>622</sup>  
~~706~~. (Amended) A programmable infusion system in  
accordance with claim ~~703~~ <sup>619</sup>, further comprising means for

detecting the rate at which said infusion means is operating  
, said rate detecting means being coupled to said alarm  
generating means, wherein one of said improper operational  
[operation] conditions comprises [comprise] operation of said  
infusion means at an improper rate.--

<sup>623</sup>  
--~~707~~. (Amended) A programmable infusion system in  
accordance with claim ~~703~~,<sup>619</sup> wherein one of said improper  
operational [operation] conditions comprises receiving of a  
command by said command receiver means which cannot be  
executed.--

<sup>624</sup>  
--~~708~~. (Amended) A programmable infusion system in  
accordance with claim ~~703~~,<sup>619</sup> further comprising battery means for  
powering said infusion means and means for determining the  
voltage of said battery means, said voltage determining means  
being coupled to said alarm generating means, wherein one of  
said improper operational conditions [operation condition]  
comprises low battery means voltage.--

<sup>625</sup>  
--~~709~~. (Amended) A programmable infusion system in accordance  
with claim ~~703~~,<sup>619</sup> further comprising means for detecting the  
amount of medication disposed in said reservoir, said medica-  
tion amount detecting means being coupled to said alarm  
generating means, wherein one of said improper operational  
[operation] conditions comprises a preselected amount of  
medication remaining in said medication reservoir.--

<sup>626</sup>  
--~~710~~. (Amended) A programmable infusion system in  
accordance with claim ~~702~~,<sup>618</sup> further comprising means for  
detecting a medication leak, said medication detecting means  
being coupled to said alarm means, wherein one of said improper  
operational [operation] conditions comprises a medication leak  
out of said medication reservoir.--

627  
--711. (Amended) A programmable infusion system in accordance with claim ~~702~~<sup>618</sup>, further comprising means for detecting a body fluid leak, said body fluid detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises a leak of body fluids into said infusion apparatus.--

628  
--712. (Amended) A programmable infusion system in accordance with claim ~~702~~<sup>618</sup>, further comprising means for detecting the rate at which said infusion means is operating, said rate detecting means being coupled to said alarm generating means, wherein one of said improper operational [operation] conditions comprises [comprise] operation of said infusion means at an improper rate.--

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629  
--713. (Amended) A programmable infusion system in accordance with claim ~~702~~<sup>618</sup>, wherein one of said improper operational [operation] conditions comprises receiving of a command by said command receiver means which cannot be executed.--

630  
--714. (Amended) A programmable infusion system in accordance with claim ~~702~~<sup>618</sup>, further comprising battery means for powering said infusion means and means for determining the voltage of said battery means, said voltage determining means being coupled to said alarm generating means wherein one of said improper operational conditions [operation condition] comprises low battery means voltage.--

631  
--715. (Amended) A programmable infusion system in accordance with claim ~~702~~<sup>618</sup>, further comprising means for detecting the amount of medication disposed in said reservoir, said medication amount detecting means being coupled to said

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alarm generating means wherein one of said improper operational  
[operation] conditions comprises a preselected amount of  
medication remaining in said medication reservoir.--

---

Claim 721, line 6, delete "and".

Claim 721, line 7, delete "the reservoir" and replace  
therefor --said medication--.

Claim 722, the last line thereof, delete "reservoir" and  
replace therefor --medication--.

Claim 723, line 5, after "when said" insert --reservoir--.

Claim 723, line 7, delete "reservoir".

Claim 725, lines 7 and 8, delete "telemetering" and in each  
instance replace therefor --telemetry--.

Claim 726, lines 4 and 5, delete "telemetering" and in each  
instance replace therefor --telemetry--.

Respectfully submitted,  
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By



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